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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	SEP 09	CA/CAplus records now contain indexing from 1907 to the present
NEWS 4	DEC 08	INPADOC: Legal Status data reloaded
NEWS 5	SEP 29	DISSABS now available on STN
NEWS 6	OCT 10	PCTFULL: Two new display fields added
NEWS 7	OCT 21	BIOSIS file reloaded and enhanced
NEWS 8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9	NOV 24	MSDS-CCOHS file reloaded
NEWS 10	DEC 08	CABA reloaded with left truncation
NEWS 11	DEC 08	IMS file names changed
NEWS 12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS 13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14	DEC 17	DGENE: Two new display fields added
NEWS 15	DEC 18	BIOTECHNO no longer updated
NEWS 16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS 17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS 18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19	DEC 22	ABI-INFORM now available on STN
NEWS 20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS 21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAplus
NEWS 22	FEB 05	German (DE) application and patent publication number format changes
NEWS 23	MAR 03	MEDLINE and LMEDLINE reloaded
NEWS 24	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS 25	MAR 03	FRANCEPAT now available on STN

NEWS EXPRESS	MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 11:11:22 ON 24 MAR 2004

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:11:38 ON 24 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0
DICTIONARY FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading c:\program files\stnexp\queries\10645401.1

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full
FULL SEARCH INITIATED 11:12:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 603 TO ITERATE

100.0% PROCESSED 603 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L2 2 SEA SSS FUL L1

=> file marpat
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'MARPAT' ENTERED AT 11:12:13 ON 24 MAR 2004
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE CONTENT: 1988-PRESENT (VOL 140 ISS 12)(20040319/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6696581 24 FEB 2004
DE 10317487 19 FEB 2004
EP 1389746 18 FEB 2004
JP 2004059557 26 FEB 2004
WO 2004015164 19 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s l1 sss full
FULL SEARCH INITIATED 11:12:18 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED - 1567 TO ITERATE

100.0% PROCESSED 1567 ITERATIONS 8 ANSWERS
SEARCH TIME: 00.00.07

L3 8 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	109.42	265.05

FILE 'CAPLUS' ENTERED AT 11:12:32 ON 24 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 24 Mar 2004 VOL 140 ISS 13
FILE LAST UPDATED: 23 Mar 2004 (20040323/ED)

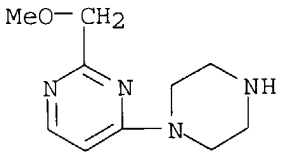
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2
L4 2 L2

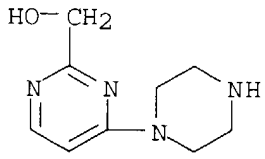
=> s l3
L5 8 L3

=> d l4 fbib hitstr abs total

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:916027 CAPLUS
DN 136:200160
TI Orally-Effective, Long-Acting Sorbitol Dehydrogenase Inhibitors: Synthesis, Structure-Activity Relationships, and in Vivo Evaluations of Novel Heterocycle-Substituted Piperazino-Pyrimidines
AU Chu-Moyer, Margaret Y.; Ballinger, William E.; Beebe, David A.; Berger, Richard; Coutcher, James B.; Day, Wesley W.; Li, Jiancheng; Mylari, Banavara L.; Oates, Peter J.; Weekly, R. Matthew
CS Departments of Cardiovascular and Metabolic Disease and Drug Metabolism Development, Pfizer Global Research and Development, Groton Laboratories, Groton, CT, 06340, USA
SO Journal of Medicinal Chemistry (2002), 45(2), 511-528
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
OS CASREACT 136:200160
IT **300553-61-1P 400784-99-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and structure-activity relationships of oral antidiabetic, sorbitol dehydrogenase-inhibiting heterocyclic piperazinopyrimidines)
RN 300553-61-1 CAPLUS
CN Pyrimidine, 2-(methoxymethyl)-4-(1-piperazinyl)- (9CI) (CA INDEX NAME)

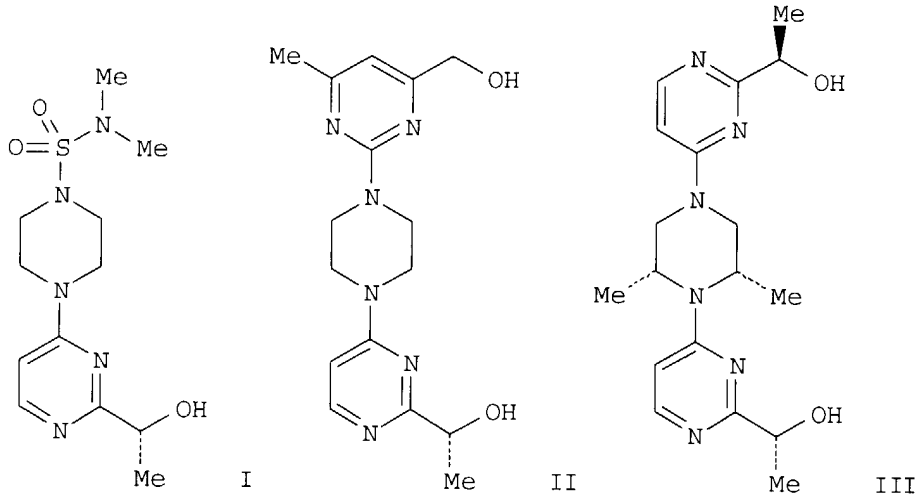


RN 400784-99-8 CAPLUS
CN 2-Pyrimidinemethanol, 4-(1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

GI



AB Optimization of a previously disclosed sorbitol dehydrogenase inhibitor (SDI, I) for potency and duration of action was achieved by replacing the metabolically labile N,N-dimethylsulfamoyl group with a variety of heterocycles. Specifically, this effort led to a series of novel, in vitro potent SDI's, e.g. the [[(hydroxymethylpyrimidinyl)piperazinyl]pyrim idinyl]ethanol II, with longer serum half-lives and acceptable in vivo activity in acutely diabetic rats. However, the desired in vivo potency in chronically diabetic rats, ED90 ≤ 5 mg/kg/day, was achieved only through further modification of the piperazine linker. Several members of this family, including [[(hydroxyethylpyrimidinyl)dimethylpiperazinyl]pyri midinyl]ethanol III, showed better than the targeted potency with ED90 values of 1-2 mg/kg/day. III was further profiled and found to be a selective inhibitor of sorbitol dehydrogenase, with excellent pharmacodynamic/pharmacokinetic properties, demonstrating normalization of sciatic nerve fructose in a chronically diabetic rat model for .apprx.17 h, when administered orally at a single dose of 2 mg/kg/day.

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:725471 CAPLUS

DN 133:281794
TI Preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors
IN Chu-moyer, Margaret Yuhua; Murry, Jerry Anthony; Mylari, Banavara Lakshman; Zembrowski, William James
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 328 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

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PI	WO 2000059510	A1	20001012	WO 2000-IB296	20000316
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	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				US 1999-127437PP	19990401
	AU 2000031845	A5	20001023	AU 2000-31845	20000316
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	NZ 514144	A	20010928	NZ 2000-514144	20000316
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	EP 1185275	A1	20020313	EP 2000-909565	20000316
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				WO 2000-IB296 W	20000316
	JP 2002541109	T2	20021203	JP 2000-609073	20000316
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				WO 2000-IB296 W	20000316
	EE 200100509	A	20021216	EE 2001-509	20000316
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
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				WO 2000-IB296 W	20000316
	HR 2001000716	A1	20021231	HR 2001-716	20011001
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
	ZA 2001008039	A	20030722	ZA 2001-8039	20011001
				US 1999-127437PP	19990401
	BG 106038	A	20020628	BG 2001-106038	20011023
				US 1999-127437PP	19990401
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	US 2003065179	A1	20030403	US 2002-87869	20020228
	US 6602875	B2	20030805		

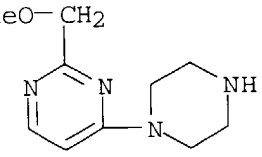
US 6660740	B1	20031209	US 1999-127437PP 19990401 US 2000-538039 A320000329 US 2003-384424 20030310 US 1999-127437PP 19990401 US 2000-538039 A320000329 US 2002-87869 A320020228	

OS MARPAT 133:281794

IT **300553-61-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors)

RN 300553-61-1 CAPLUS

CN Pyrimidine, 2-(methoxymethyl)-4-(1-piperazinyl)- (9CI) (CA INDEX NAME)



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = CHO, COMe; COCH2Me, etc.; R2 = H, alkyl, alkoxy; R3 = II-IV, etc.; R23 = CONR25R26, SO2NR25R26 (wherein R25 = H, alkyl, arylalkylenyl; R26 = arylalkylenyl); R24 = H, alkyl, alkoxycarbonyl, etc.; R27 = H, alkyl; R28, R29 = H, OH, halo, etc.], sorbitol dehydrogenase inhibitors (no data) which are useful in treating or preventing diabetic complications, particularly diabetic neuropathy, diabetic nephropathy, diabetic microangiopathy, diabetic macroangiopathy and diabetic cardiomyopathy, were prepared and formulated. E.g., a multi-step synthesis of the pyrimidine (R)-V, was given. This invention is also directed to pharmaceutical compns. comprising a combination of the compd.I with an aldose reductase inhibitor and to methods of treating or preventing diabetic complications therewith. This invention is also directed to pharmaceutical compns. comprising a combination of the compound I with an NHE-1 inhibitor and to methods of treating cardiomyopathy and other heart-related problems therewith.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 15 fbib hitstr abs totalt
'TOTALT' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers

CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY,
e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end

=> d his

(FILE 'HOME' ENTERED AT 11:11:22 ON 24 MAR 2004)

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     FILE 'REGISTRY' ENTERED AT 11:11:38 ON 24 MAR 2004
L1                STRUCTURE UPLOADED
L2              2 S L1 SSS FULL

     FILE 'MARPAT' ENTERED AT 11:12:13 ON 24 MAR 2004
L3              8 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 11:12:32 ON 24 MAR 2004
L4              2 S L2
L5              8 S L3

=> d l5 fbib hitstr abs total

L5   ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:454066  CAPLUS
DN   139:36531
TI   Preparation of morpholinopyrimidine derivatives as interleukin-12
     inhibitors
IN   Ono, Mitsunori; Sun, Lijun; Przewloka, Teresa; Zhang, Shijie; Kostik,
     Elena; Ying, Weiwen; Wada, Yumiko; Koya, Keizo; Wu, Yaming; Zhou, Dan;
     Tatsuta, Noriaki
PA   Synta Pharmaceuticals Corporation, USA
SO   PCT Int. Appl., 67 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.         KIND  DATE           APPLICATION NO.   DATE
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PI   WO 2003047516      A2    20030612       WO 2002-US38161   20021127
     WO 2003047516      A3    20030731
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
                                            US 2001-742     A120011130
                                            US 2002-192347  A120020710
     US 2003139403      A1    20030724       US 2001-742       20011130
     US 6693097         B2    20040217
     US 2003114446      A1    20030619       US 2002-192347    20020710
     US 6660733         B2    20031209
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PATENT FAMILY INFORMATION:
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PI   US 2003114446      A1    20030619       US 2002-192347    20020710
     US 6660733         B2    20031209
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WO 2003047516 A2 20030612 WO 2002-US38161 20021127
WO 2003047516 A3 20030731
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US 2001-742 A120011130
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US 2004048873 A1 20040311 US 2003-656671 20030905
US 2001-742 A120011130
US 2004053937 A1 20040318 US 2003-655672 20030905
US 2001-742 A220011130
US 2002-192347 A120020710

FAN 2004:100866

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PI	US 2004024206	A1	20040205	US 2002-305039	20021126
				US 2001-742	A220011130
	US 2003139403	A1	20030724	US 2001-742	20011130
	US 6693097	B2	20040217		
	US 2004048873	A1	20040311	US 2003-656671	20030905
				US 2001-742	A120011130

OS MARPAT 139:36531
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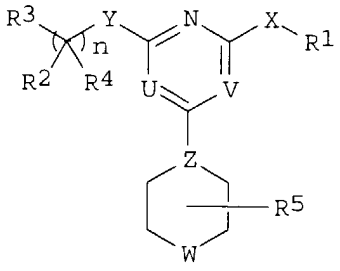

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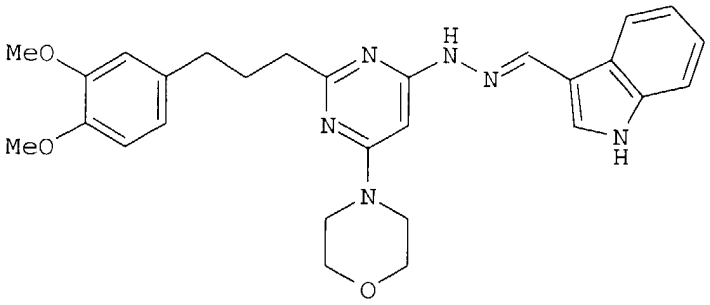


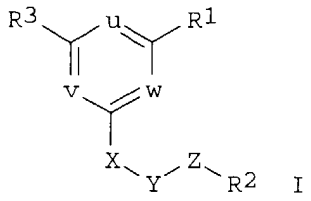
II

AB The title compds. I [wherein R1 = N=CRaRb, aryl, or heteroaryl; R2 and R4 = independently Rc, halo, NO2, CN, isothionitro, SRc, or ORc; or R2 and R4 together form =O; R3 = Rc, alkenyl, alkynyl, ORc, OCORc, SO2Rc, SORc, SO2NRcRd, SRc, NRcRd, NRcCORd, NRcCO2Rd, NRcCONRcRd, NRcSO2Rd, CORc, CO2Rc, or CONRcRd; R5 = H or alkyl; n = 0-6; X = O, S, SO, SO2, or NRc; Y = a bond, CH2, CO, C=NRc, C=NORc, C=NSRc, O, S, SO, SO2, or NRc; Z = N or CH; one of U and V is N, the other is CRc; W = O, S, SO, SO2, NRc, or NCORc; Ra and Rb = independently H, alkyl, aryl, or heteroaryl; Rc and Rd = independently H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, or alkylcarbonyl] are prepared as interleukin-12 (IL-12) inhibitors. For example, the pyrimidine II was prepared in a multi-step synthesis in moderate yield. I showed IC50 of <1 nM against human PBMC or THP-1 cells. I are useful for treating IL-12 over-production related diseases (e.g., rheumatoid arthritis, sepsis, Crohn's disease, multiple sclerosis, psoriasis, or insulin-dependent diabetes mellitus) (no data).

L5 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:220561 CAPLUS
DN **136:263168**
TI Preparation of substituted heterocyclic aryl-alkyl-aryl compounds as thrombin inhibitors
IN Isaacs, Richard C.; Williams, Peter D.; Lyle, Terry A.; Staas, Donnette D.; Savage, Kelly L.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002022584	A1	20020321	WO 2001-US28791	20010911
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2000-231656PP	20000911
	AU 2001094557	A5	20020326	AU 2001-94557	20010911
				US 2000-231656PP	20000911
				WO 2001-US28791W	20010911

OS MARPAT 136:263168
GI



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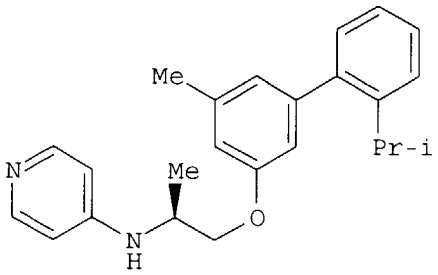

II

AB Title compds. I [u, v, w = CH, N; X = 0, SO0-2, NH, alkenyl, C:O, C:ONH, C:OO, alkyl, CH2NH, CH2O, CF2; Y = (CH2)0-1(CR4R5)(CH2)0-1; Z = O, S0-2, C:O, amino, CF2, bond; R1 = H, alkyl(CN), C:O, (CH2)0-1-carboxy, CF3, alkoxy, halo, SO0-2, amino; R2 = (un)substituted Ph, 5-6-membered heterocycle; R3 = Ph, (un)substituted ring system, 5-6-membered heterocycle; R4-5 = H, alkyl; R6, R8 = halo, alkylamino, heterocycle] were prepared Examples include data for over 20 compds., 3 solid oral dosage formulations and an in-vitro assay for protease determination for example compds.

For instance, 2'-isopropyl-5-methylbiphenyl-3-ol (prepared in 3 steps from 2-isopropylphenyl iodide) was reacted with (S)-2-(pyridin-4-ylamino)propan-1-ol to give II isolated as the trifluoroacetate. Example compds. exhibited inhibitory activity against human thrombin, Ki < 24 nM. I are useful in the treatment of blood coagulation and cardiovascular disorders.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:144736 CAPLUS
DN **132:194392**
TI Preparation of heterocyclic carboxamide derivatives as antiviral agents
IN Furuta, Yousuke; Egawa, Hiroyuki
PA Toyama Chemical Co., Ltd., Japan
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000010569	A1	20000302	WO 1999-JP4429	19990818

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,

MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
CA 2339272	AA	20000302	CA 1999-2339272 19990818
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
AU 9953004	A1	20000314	AU 1999-53004 19990818
AU 756635	B2	20030116	
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
EP 1112743	A1	20010704	EP 1999-938504 19990818
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
BR 9913097	A	20010925	BR 1999-13097 19990818
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
NZ 509748	A	20030131	NZ 1999-509748 19990818
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
JP 3453362	B2	20031006	JP 2000-565890 19990818
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
RU 2224520	C2	20040227	RU 2001-104536 19990818
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
ZA 2001001101	A	20011211	ZA 2001-1101 20010208
			JP 1998-250441 A 19980820
NO 2001000836	A	20010418	NO 2001-836 20010219
			JP 1998-250441 A 19980820
			JP 1999-145922 A 19990526
			WO 1999-JP4429 W 19990818
US 2002013316	A1	20020131	US 2001-788992 20010220
			JP 1998-250441 A 19980820
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			WO 1999-JP4429 W 19990818

OS MARPAT 132:194392
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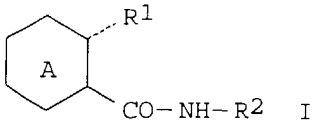

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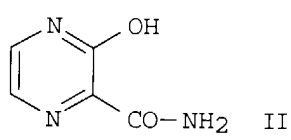


II

AB The title compds. I [ring A is an optionally substituted pyrazine, pyrimidine, pyridazine or triazine ring; R1 is O or OH; R2 is hydrogen, acyl, or optionally substituted carbamoylalkyl or carboxyalkyl; and the dotted line represents a single or double bond] are prepared I are useful as preventives and therapeutic agents for infections with viruses, particularly influenza virus. The title compound II at 1 μg/mL showed 91.9% inhibition of influenza virus.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:780344 CAPLUS
DN **132:3362**
TI Preparation of cytokine-inhibiting pyrimidinylpyrazoles
IN Adams, Jerry Leroy; Gallagher, Timothy Francis; Garigipati, Ravi Shanker; Thompson, Susan Mary
PA SmithKline Beecham Corporation, USA
SO U.S., 15 pp., Cont.-in-part of U.S. 5,559,137.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

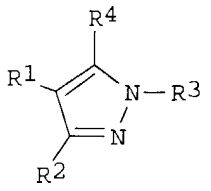
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5998425	A	19991207	US 1996-454170	19961115
				US 1994-242906 A2	19940516
				WO 1995-US6287 W	19950516
	US 5559137	A	19960924	US 1994-242906	19940516
	WO 9531451	A1	19951123	WO 1995-US6287	19950516
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
				US 1994-242906 A	19940516
	US 6306883	B1	20011023	US 1999-456019	19991203
				US 1994-242906 A2	19940516
				WO 1995-US6287 W	19950516
				US 1996-454170 A3	19961115

PATENT FAMILY INFORMATION:
FAN 1996:161154

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9531451	A1	19951123	WO 1995-US6287	19950516
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
				US 1994-242906 A	19940516
	US 5559137	A	19960924	US 1994-242906	19940516
	JP 10500413	T2	19980113	JP 1995-529891	19950516
				US 1994-242906 A	19940516
				WO 1995-US6287 W	19950516
	EP 871622	A1	19981021	EP 1995-921292	19950516
	R: BE, CH, DE, FR, GB, IT, LI, NL				
				US 1994-242906 A	19940516
				WO 1995-US6287 W	19950516
	US 5998425	A	19991207	US 1996-454170	19961115
				US 1994-242906 A2	19940516
				WO 1995-US6287 W	19950516
	US 6306883	B1	20011023	US 1999-456019	19991203
				US 1994-242906 A2	19940516

WO 1995-US6287 W 19950516
US 1996-454170 A319961115

OS MARPAT 132:3362
GI



I

AB The title compds. [I; one of R1 and R2 is (un)substituted 4-pyrimidinyl and the other is (un)substituted Ph or naphthyl; R3 = Q(Ym)t; Q = aryl; Y = H, alkyl, haloalkyl, etc.; m = 0-2; t = 1-3; R4 = H, alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, etc.] [e.g., 4-(2-amino-4-pyrimidinyl)-3-(4-fluorophenyl)-1-phenylpyrazole; m.p. 170-171°], which are cytokine inhibitors (no data) and useful for the treatment of cytokine-mediated diseases (no data), are prepared
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:239219 CAPLUS
DN **128:282847**
TI Preparation of 1,4-disubstituted piperazines for the treatment of painful, hyperalgesic and/or inflammatory conditions
IN Hohlweg, Rolf; Madsen, Peter; Jorgensen, Tine Krogh; Andersen, Knud Erik; Watson, Brett; Polivka, Zdenek; Konigova, Otylie; Kovandova, Martina; Silhankova, Alexandra; Valenta, Vladimir
PA Novo Nordisk A/S, Den.
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9815548	A1	19980416	WO 1997-DK422	19971002
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
				DK 1996-1090	A 19961004
	AU 9743772	A1	19980505	AU 1997-43772	19971002
	AU 740662	B2	20011108		
				DK 1996-1090	A 19961004
				WO 1997-DK422	W 19971002
	EP 934312	A1	19990811	EP 1997-941884	19971002
	EP 934312	B1	20030319		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO

				DK 1996-1090 A 19961004
				WO 1997-DK422 W 19971002
BR 9712196	A	19990831	BR 1997-12196	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
CN 1234799	A	19991110	CN 1997-199184	19971002
CN 1088459	B	20020731		
			DK 1996-1090	A 19961004
JP 2001502307	T2	20010220	JP 1998-517093	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
RU 2188197	C2	20020827	RU 1999-109024	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
AT 234831	E	20030415	AT 1997-941884	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
ES 2194217	T3	20031116	ES 1997-941884	19971002
			DK 1996-1090	A 19961004
ZA 9708864	A	19980406	ZA 1997-8864	19971003
			DK 1996-1090	A 19961004
US 5916889	A	19990629	US 1997-943726	19971003
			DK 1996-1090	A 19961004
US 6004961	A	19991221	US 1999-271785	19990318
			DK 1996-1090	A 19961004
			US 1997-943726	A319971003
US 6040302	A	20000321	US 1999-271565	19990318
			DK 1996-1090	A 19961004
			US 1997-943726	A319971003
US 6133268	A	20001017	US 1999-271564	19990318
			DK 1996-1090	A 19961004
			US 1997-943726	A319971003
NO 9901565	A	19990604	NO 1999-1565	19990330
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
KR 2000048899	A	20000725	KR 1999-702928	19990403
			DK 1996-1090	A 19961004

OS MARPAT 128:282847
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1, R2 = H, halo, CF3, etc.; X = o-phenylene, O, S, etc.; Y = N-CH2-, CH-CH2-, C:CH-, CH-O- (only the first atom participates in the ring system); r = 1-3; Z = II-V (M1, M2 = C, N; R5 = H, C1-6 alkyl, PhCH2, Ph; R3 = H, halo, CF3, NO2, CN; R4 = H, halo, CF3, etc.)] and their salts, useful for the clin. treatment of painful, hyperalgesic and/or inflammatory conditions in which C-fibers play a pathophysiol. role such as e.g. neurogenic pain, inflammation, migraine, neuropathy, itching and rheumatoid arthritis, as well as for the treatment of indications caused by or related to the secretion and circulation of insulin antagonizing peptides, e.g. non-insulin-dependent diabetes mellitus (NIDDM) and ageing-associated obesity, were prepared and formulated. Thus, reaction of

6-(1-piperazinyl)-2-pyridinecarboxylic acid Et ester (preparation described) with (10,11-dihydro-5H-dibenzo[b,f]acepin-5-yl)-1-Pr methanesulfonate in the presence of K2CO3 in Me2CO followed by hydrolysis of the resulting ester with NaOH in H2O/EtOH afforded the title compound VI.HCl which showed 61% inhibition of histamine induced pain response at 1.0 mg/kg.

L5 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:180867 CAPLUS
DN **128:230376**
TI Benzamidine derivatives substituted by cyclic amino acid or cyclic hydroxy acid derivatives, and their use as anticoagulants
IN Kochanny, Monica; Morrissey, Michael M.; Ng, Howard P.
PA Schering A.-G., Germany
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811094	A1	19980319	WO 1997-EP4961	19970911
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
	US 6008234	A	19991228	US 1997-920319	19970827
				US 1996-713066 A2	19960912
	AU 9743843	A1	19980402	AU 1997-43843	19970911
	AU 723999	B2	20000907		
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	EP 929547	A1	19990721	EP 1997-942015	19970911
	EP 929547	B1	20021127		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	JP 2001500147	T2	20010109	JP 1998-513257	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	AT 228513	E	20021215	AT 1997-942015	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	NO 9901206	A	19990511	NO 1999-1206	19990311
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	MX 9902396	A	20000331	MX 1999-2396	19990311

US 1996-713066 A 19960912
US 1997-920319 A 19970827
WO 1997-EP4961 W 19970911

PATENT FAMILY INFORMATION:

FAN 1999:818934

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6008234	A	19991228	US 1997-920319	19970827
				US 1996-713066 A2	19960912
	WO 9811094	A1	19980319	WO 1997-EP4961	19970911
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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	AU 9743843	A1	19980402	AU 1997-43843	19970911
	AU 723999	B2	20000907		
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
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	EP 929547	B1	20021127		
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				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	CN 1234798	A	19991110	CN 1997-198664	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
	JP 2001500147	T2	20010109	JP 1998-513257	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	AT 228513	E	20021215	AT 1997-942015	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	PT 929547	T	20030331	PT 1997-97942015	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
	ES 2188979	T3	20030701	ES 1997-942015	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
	KR 2000036017	A	20000626	KR 1999-701989	19990310
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				US 1997-920319 A	19970827
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				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
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				US 1996-713066 A	19960912

			US 1997-920319 A 19970827
			WO 1997-EP4961 W 19970911
US 6177473	B1	20010123	US 1999-439065 19991112
			US 1996-713066 B219960912
			US 1997-920319 A319970827
US 6232325	B1	20010515	US 1999-438354 19991112
			US 1996-713066 B219960912
			US 1997-920319 A319970827
US 6265404	B1	20010724	US 1999-438270 19991112
			US 1996-713066 B219960912
			US 1997-920319 A319970827
CN 1338454	A	20020306	CN 2001-121736 20010703
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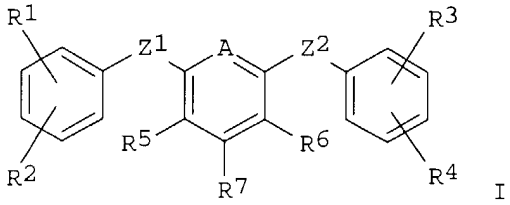
			US 1997-920319 A 19970827

OS MARPAT 128:230376

GI



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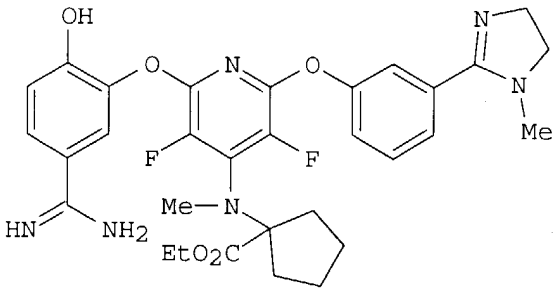


II

AB The invention is directed to benzamidine derivs. substituted by cyclic amino acid and cyclic hydroxy acid derivs., which are represented by seven general formulas, e.g., I [A = CR8 or N; Z1, Z2 = O, NR9, S, S(O), S(O)2, or OCH2; R1, R4 = H, halo, alkyl, NO2, OR9, CO2R9, NR9R10 or derivs.; R2 = C(:NH)NH2, C(:NH)NHOR9, C(:NH)NHCO2R12, C(:NH)NHCOR9, etc.; R3 = H, alkyl, halo, haloalkyl, NO2, ureido, guanidino, OR9, C(:NH)NH2 or derivs., etc.; R5, R6 = H, halo, alkyl, haloalkyl, NR9R10, CO2R9, etc.; R7 = NR9(CR9R10)0-4R13, O(CR9R10)0-4R13, or NR14R15; R8 = H, alkyl, halo; R9, R10 = H, alkyl, (un)substituted aryl or aralkyl; R12 = alkyl, (un)substituted aryl or aralkyl; R13 = (un)substituted carbocycle; R13, NR14R15 = (un)substituted heterocycle]. The compds. are useful as anticoagulants. This invention is also directed to pharmaceutical compns. containing the compds., and their use to treat thrombotic disease states. For example, pentafluoropyridine underwent a sequence of: (1) amination in the 4-position by Et 1-amino-1-cyclopentanecarboxylate-HCl (82%); (2) N-methylation of the amino group (65%); (3) etherification in the

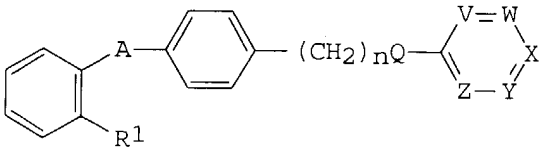
2-position with 2-(benzyloxy)-5-cyanophenol (60%); (4) etherification in the 6-position with 3-(1-methylimidazolin-2-yl)phenol; and (5) Pinner reaction of the nitrile with concomitant debenzylation, to give title compound II (isolated as the CF3CO2H salt).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

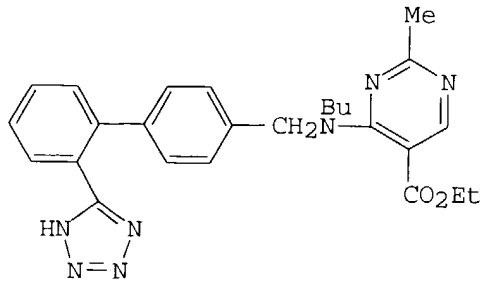
L5 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:426587 CAPLUS
DN **117:26587**
TI Preparation of [(tetrazolylbiphenyl)methylamino]pyrimidinecarboxylates and related compounds for treatment of psoriasis
IN Boger, Robert S.
PA Abbott Laboratories, USA
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5104877	A	19920414	US 1991-661563	19910225
WO 9214468	A1	19920903	WO 1992-US656	19920128
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
			US 1991-661563	19910225

OS MARPAT 117:26587
GI



I



II

AB Title compds. [I; A = bond, O, CO; Q = NR4, O, S; R4 = H, (alkoxy)alkyl; R1 = tetrazolyl, CO2R5, NHSO2R6; R5 = H, protecting group; R6 = (halo)alkyl; V, W, X, Y, Z = N, CH, CR2, CR3; R2 = alkyl(thio), alkoxyalkyl, alkylthioalkyl, arylalkyl, amino; R3 = cyano, NO2, NHSO2R9, CO2R10, etc.; R9 = (halo)alkyl; R10 = H, protecting group; n = 0, 1] were prepared as angiotensin II antagonists for treatment of psoriasis (no data).

Thus, N-triphenylmethyl-5-(4'-butylaminomethylbiphenyl-2-yl)tetrazole (preparation given) was condensed with Et 2-methyl-4-chloropyrimidine-5-carboxylate in THF containing Et3N and the product was treated with concentration
HCl/EtOH to give title compound II.

L5 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:194353 CAPLUS
DN **116:194353**
TI Substituted pyrimidine derivatives, their preparation and their use as reagants
IN Geisen, Karl; Utz, Roland; Nimmesgern, Hildegard; Lang, Hans Jochen
PA Hoechst A.-G., Germany
SO Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 470616	A2	19920212	EP 1991-113334	19910808
EP 470616	A3	19920325		
EP 470616	B1	19970219		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
			DE 1990-4025387A	19900810
DE 4025387	A1	19920213	DE 1990-4025387	19900810
US 5215990	A	19930601	US 1991-741810	19910808
			DE 1990-4025387A	19900810
IL 99134	A1	19950831	IL 1991-99134	19910808
			DE 1990-4025387A	19900810
AT 149032	E	19970315	AT 1991-113334	19910808
			DE 1990-4025387A	19900810
ES 2097774	T3	19970416	ES 1991-113334	19910808
			DE 1990-4025387A	19900810
CA 2048842	AA	19920211	CA 1991-2048842	19910809
CA 2048842	C	20020409		
			DE 1990-4025387A	19900810
AU 9182561	A1	19920213	AU 1991-82561	19910809
AU 641797	B2	19930930		
			DE 1990-4025387A	19900810
ZA 9106290	A	19920429	ZA 1991-6290	19910809
			DE 1990-4025387A	19900810
JP 04230669	A2	19920819	JP 1991-223671	19910809
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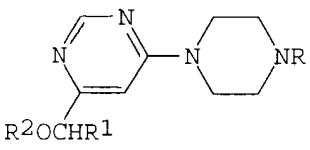
OS MARPAT 116:194353
GI



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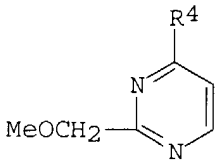

II

AB Pyrimidinylpiperazines I (R = CHO, COR3, SO2R3; R1 = H, Me; R2 = H, alkyl, CH2Ph, Ac, Bz; R3 = alkyl, cycloalkyl, Ph, substituted Ph, amino, pyridyl) were prepared for use as inducers of elevated intracellular sorbitol levels in tests for aldose reductase inhibitors (no data). Thus, AcOEt was formylated with HCO2Et and the resulting HCOCH2CO2Et was converted to its Na salt and treated with MeOCH2C(:NH)NH2·Hcl to give pyrimidinol II (R4 = OH) which was chlorinated with POCl3 and treated with dimethylsulfamoylpiperazine to give I (R = SO2NMe2, R1 = H, R2 = Me). The latter compound was demethylated with BBr3, giving I (R = SO2NMe2, R1, R2 = H). At 25 mg/kg orally in rats the latter compound caused greatly increased intracellular sorbitol concns. which were inhibited by the aldose reductase inhibitor spiro-2,7-difluoro-9H-fluorene-9,4-imidazolidine-2,5-dione.

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	50.49	315.54

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-6.93	-6.93

STN INTERNATIONAL LOGOFF AT 11:14:53 ON 24 MAR 2004

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	SEP 09	CA/CAplus records now contain indexing from 1907 to the present
NEWS 4	DEC 08	INPADOC: Legal Status data reloaded
NEWS 5	SEP 29	DISSABS now available on STN
NEWS 6	OCT 10	PCTFULL: Two new display fields added
NEWS 7	OCT 21	BIOSIS file reloaded and enhanced
NEWS 8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9	NOV 24	MSDS-CCOHS file reloaded
NEWS 10	DEC 08	CABA reloaded with left truncation
NEWS 11	DEC 08	IMS file names changed
NEWS 12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS 13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14	DEC 17	DGENE: Two new display fields added
NEWS 15	DEC 18	BIOTECHNO no longer updated
NEWS 16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS 17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS 18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19	DEC 22	ABI-INFORM now available on STN
NEWS 20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS 21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAplus
NEWS 22	FEB 05	German (DE) application and patent publication number format changes
NEWS 23	MAR 03	MEDLINE and LMEDLINE reloaded
NEWS 24	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS 25	MAR 03	FRANCEPAT now available on STN

NEWS EXPRESS	MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 11:33:40 ON 24 MAR 2004

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0
DICTIONARY FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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Uploading c:\program files\stnexp\queries\10645401.2

L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS
L1 STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full
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FULL SCREEN SEARCH COMPLETED - 603 TO ITERATE

100.0% PROCESSED 603 ITERATIONS 44 ANSWERS
SEARCH TIME: 00.00.01

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L2            44 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   155.84     156.05

FILE 'CAPLUS' ENTERED AT 11:35:05 ON 24 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 24 Mar 2004  VOL 140 ISS 13
FILE LAST UPDATED: 23 Mar 2004  (20040323/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


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L3   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:428741  CAPLUS
DN   137:10996
TI   Combination of GABA agonists and sorbitol dehydrogenase inhibitors
IN   Mylari, Banavara Lakshman
PA   Pfizer Products Inc., USA
SO   PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
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PI   WO 2002043762     A2    20020606      WO 2001-IB2213   20011119
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
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BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

			US 2000-250069PP	20001130
AU 2002015159	A5	20020611	AU 2002-15159	20011119
			US 2000-250069PP	20001130
			WO 2001-IB2213 W	20011119
EP 1337271	A2	20030827	EP 2001-983739	20011119
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			US 2000-250069PP	20001130
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BR 2001015783	A	20030916	BR 2001-15783	20011119
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			WO 2001-IB2213 W	20011119
EE 200300248	A	20031015	EE 2003-248	20011119
			US 2000-250069PP	20001130
			WO 2001-IB2213 W	20011119
US 2002091128	A1	20020711	US 2001-997038	20011129
US 6544998	B2	20030408		
			US 2000-250069PP	20001130
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			WO 2001-IB2213 W	20011119

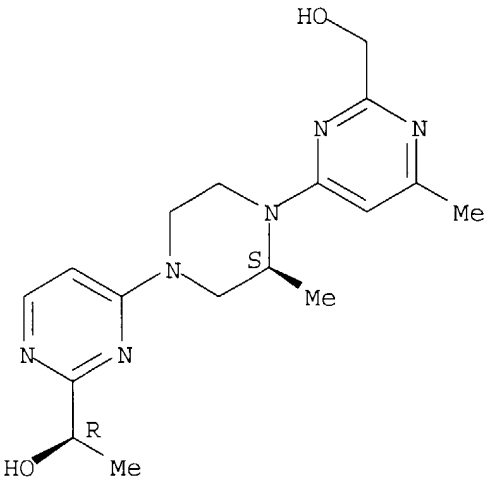
OS MARPAT 137:10996

IT **300548-92-9 300549-05-7 300549-16-0**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination of GABA agonists and sorbitol dehydrogenase inhibitors)

RN 300548-92-9 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

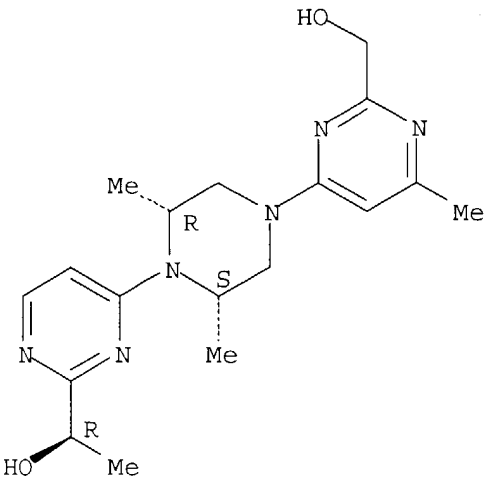
Absolute stereochemistry. Rotation (+).



RN 300549-05-7 CAPLUS

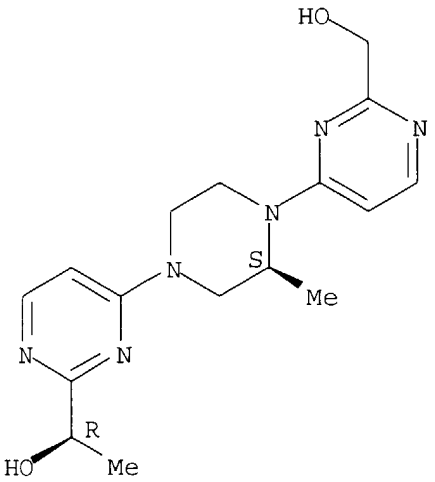
CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-2,6-dimethyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 300549-16-0 CAPLUS
CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



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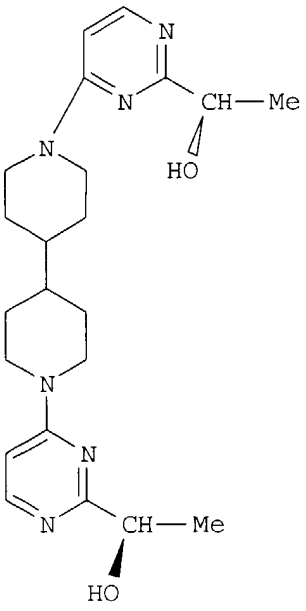

I

AB This invention relates to pharmaceutical compns. comprising combinations of a GABA agonist, a prodrug thereof or a pharmaceutically acceptable salt of said GABA agonist or said prodrug and a SDI, a prodrug thereof or a pharmaceutically acceptable salt of said SDI or said prodrug, kits containing such combinations and methods of using such combinations to treat mammals, including humans, suffering from diabetic complications such as diabetic neuropathy, diabetic nephropathy, diabetic cardiomyopathy, diabetic retinopathy, diabetic microangiopathy, diabetic macroangiopathy, cataracts or foot ulcers. An example GABA agonist is gabapentin and example SDI is I.

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:314757 CAPLUS
DN 136:345787
TI Combination of statins and sorbitol dehydrogenase inhibitors
IN Mylari, Banavara Lakshman
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002032411	A2	20020425	WO 2001-IB1506	20010820
	WO 2002032411	A3	20030313		

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2000-241339PP 20001018
AU 2001076645 A5 20020429 AU 2001-76645 20010820
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WO 2001-IB1506 W 20010820
EP 1326591 A2 20030716 EP 2001-954305 20010820
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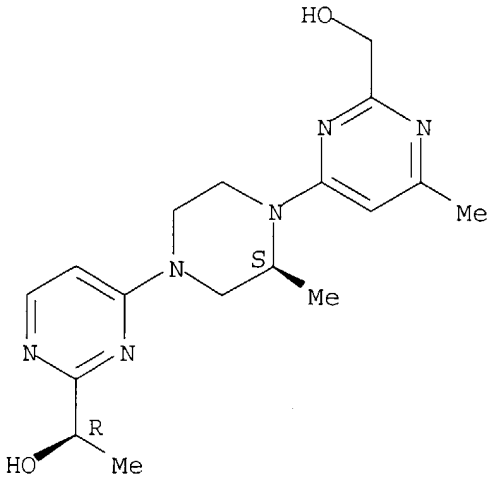
US 2000-241339PP 20001018
WO 2001-IB1506 W 20010820
US 2003186994 A1 20031002 US 2001-974414 20011009
US 2000-241339PP 20001018

IT **300548-92-9 300549-05-7 300549-16-0**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination of statins and sorbitol dehydrogenase inhibitors)

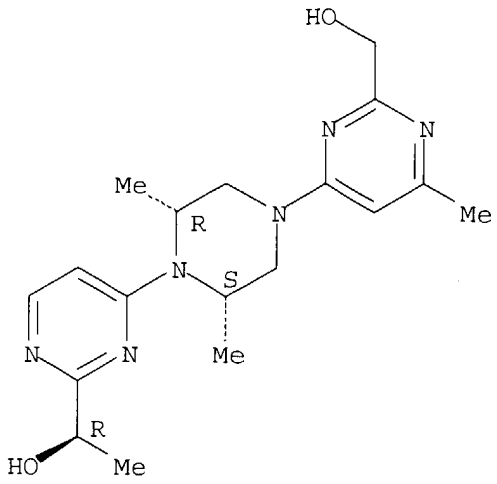
RN 300548-92-9 CAPLUS
CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



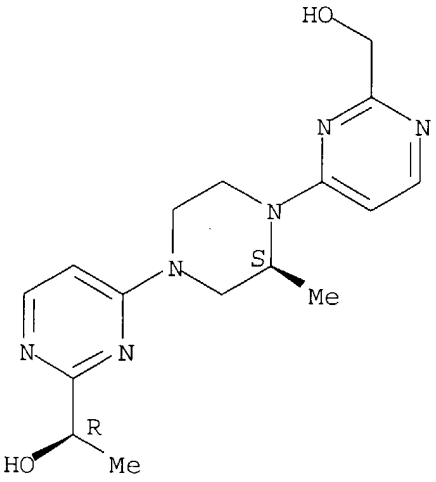
RN 300549-05-7 CAPLUS
CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-2,6-dimethyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 300549-16-0 CAPLUS
CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



AB This invention relates to pharmaceutical compns. comprising combinations of a statin or it salt, a prodrug or the prodrug and a sorbitol dehydrogenase inhibitor, a prodrug or a salt of the sorbitol dehydrogenase inhibitor or the prodrug. Kits containing such combinations and methods of using such combinations to treat mammals, including humans, suffering from arteriosclerosis and/or diabetic complications such as diabetic neuropathy, diabetic nephropathy, diabetic cardiomyopathy, diabetic retinopathy, diabetic microangiopathy, diabetic macroangiopathy, cataracts or foot ulcers are disclosed. The statins are administered in the following dosage amts.: e.g., atorvastatin 10-80 mg; simvastatin 10-40 mg;.

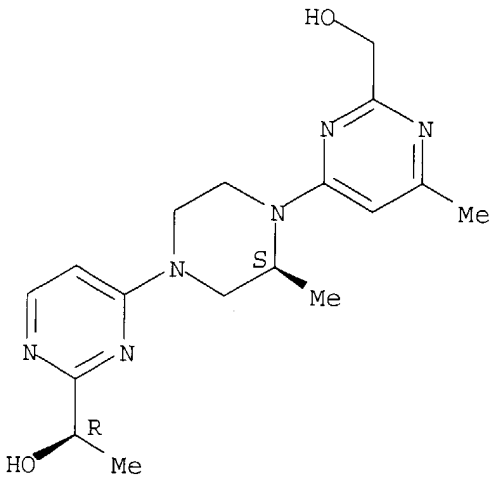
L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:936092 CAPLUS

DN 136:53752
TI Synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors
IN Mylari, Banavara L.
PA USA
SO U.S. Pat. Appl. Publ., 41 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2001056095	A1	20011227	US 2001-782798	20010213
	US 6570013	B2	20030527		
				US 2000-183004PP	20000216
	WO 2002098429	A1	20021212	WO 2001-IB1031	20010607
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				US 2001-782798 A	20010213
	US 2003212072	A1	20031113	US 2003-404628	20030401
				US 2000-183004PP	20000216
				US 2001-782798 A3	20010213

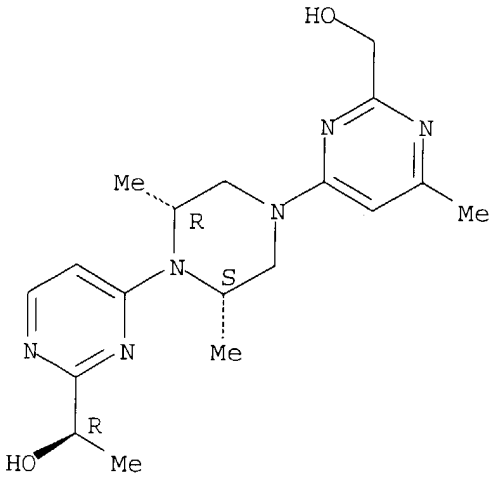
IT **300548-92-9**, 1R-[4-[4-(2-Hydroxymethyl-6-methylpyrimidin-4-yl)-3S-methylpiperazin-1-yl]pyrimidin-2-yl]ethanol **300549-05-7**, 1R-[4-[4-(2-Hydroxymethyl-6-methylpyrimidin-4-yl)-2R,6S-dimethylpiperazin-1-yl]pyrimidin-2-yl]ethanol **300549-16-0**, 1R-[4-[4-(2-Hydroxymethylpyrimidin-4-yl)-3S-methylpiperazin-1-yl]pyrimidin-2-yl]ethanol
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination pharmaceutical; synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors)
RN 300548-92-9 CAPLUS
CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



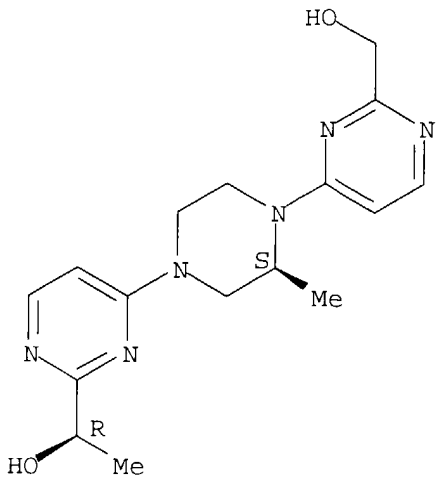
RN 300549-05-7 CAPLUS
CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-2,6-dimethyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

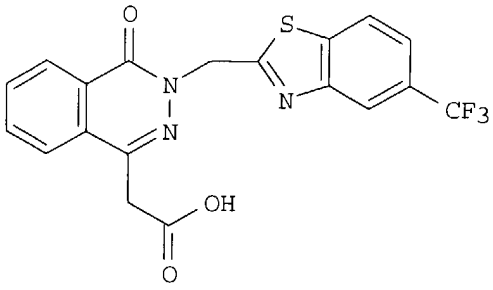


RN 300549-16-0 CAPLUS
CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

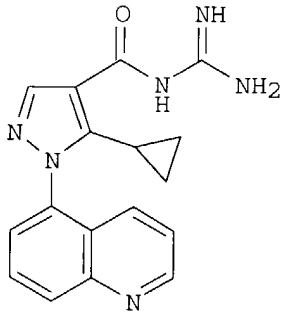
Absolute stereochemistry. Rotation (+).



GI



I

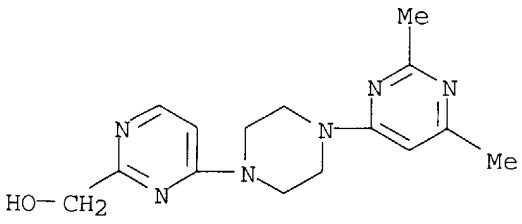


II

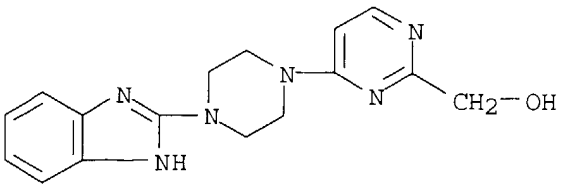
AB Mono-, di- and triethanolamine salts of [4-Oxo-(5-trifluoromethylbenzothiazol-2-ylmethyl)-3,4-dihydrophthalazin-1-yl]acetic acid (zopolrestat; I) were prepared E.g., a solution of I in acetone was added to ethanolamine (10 mol equiv, room temperature, 1 h) which afforded, after purification, the ethanolamine salt in 95% yield, m.p. 119 - 121°C. Ethanolamine salts of I are used alone or with NHE-1 inhibitors (e.g. II), selective serotonin reuptake inhibitors (SSRIs, e.g. fluoxetine), glycogen phosphorylase inhibitors (GPIs), sorbitol dehydrogenase inhibitors (SDIs)

and antihypertensive agents for treating diabetic complications.

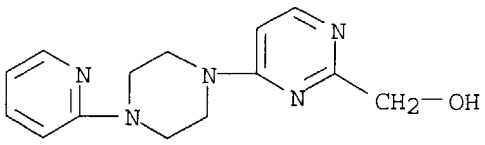
L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:916027 CAPLUS
DN 136:200160
TI Orally-Effective, Long-Acting Sorbitol Dehydrogenase Inhibitors: Synthesis, Structure-Activity Relationships, and in Vivo Evaluations of Novel Heterocycle-Substituted Piperazino-Pyrimidines
AU Chu-Moyer, Margaret Y.; Ballinger, William E.; Beebe, David A.; Berger, Richard; Coutcher, James B.; Day, Wesley W.; Li, Jiancheng; Mylari, Banavara L.; Oates, Peter J.; Weekly, R. Matthew
CS Departments of Cardiovascular and Metabolic Disease and Drug Metabolism Development, Pfizer Global Research and Development, Groton Laboratories, Groton, CT, 06340, USA
SO Journal of Medicinal Chemistry (2002), 45(2), 511-528
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
OS CASREACT 136:200160
IT **400785-00-4P 400785-12-8P 400785-13-9P**
400785-14-0P 400785-15-1P 400785-16-2P
400785-17-3P 400785-18-4P 400785-20-8P
400785-21-9P 400785-22-0P 400785-23-1P
400785-24-2P 400785-25-3P 400785-26-4P
400785-27-5P 400785-28-6P 400785-29-7P
400785-30-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and structure-activity relationships of oral antidiabetic, sorbitol dehydrogenase-inhibiting heterocyclic piperazinopyrimidines)
RN 400785-00-4 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(2,6-dimethyl-4-pyrimidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



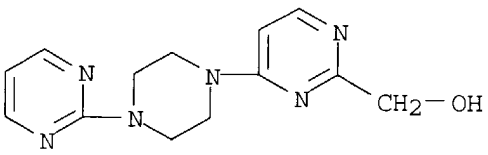
RN 400785-12-8 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(1H-benzimidazol-2-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



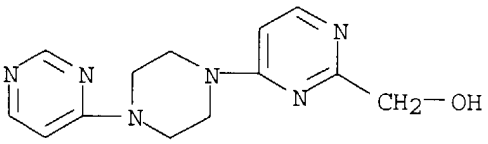
RN 400785-13-9 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(2-pyridinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



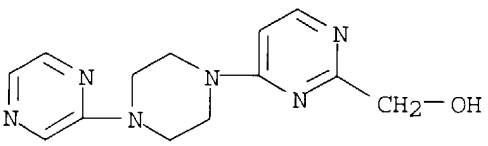
RN 400785-14-0 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(2-pyrimidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



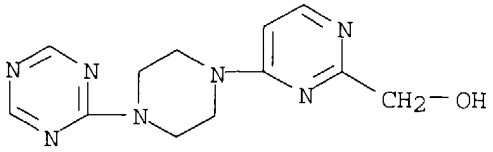
RN 400785-15-1 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(4-pyrimidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



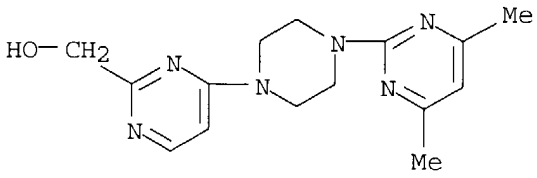
RN 400785-16-2 CAPLUS
CN 2-Pyrimidinemethanol, 4-(4-pyrazinyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



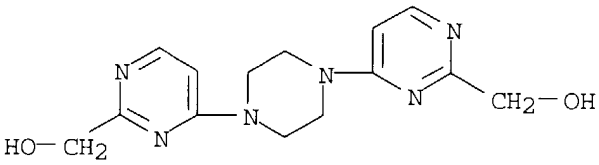
RN 400785-17-3 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(1,3,5-triazin-2-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



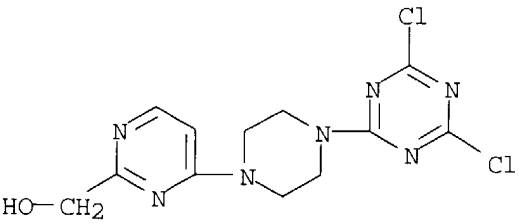
RN 400785-18-4 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(4,6-dimethyl-2-pyrimidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



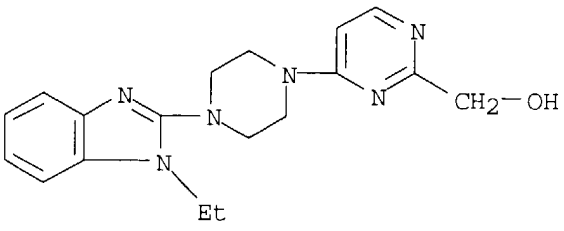
RN 400785-20-8 CAPLUS
CN 2-Pyrimidinemethanol, 4,4'-(1,4-piperazinediyl)bis- (9CI) (CA INDEX NAME)



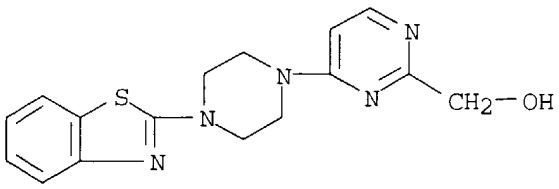
RN 400785-21-9 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(4,6-dichloro-1,3,5-triazin-2-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



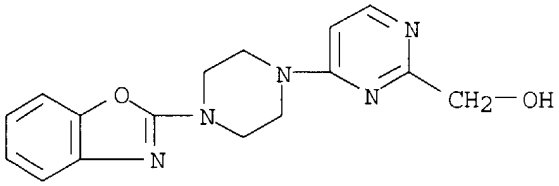
RN 400785-22-0 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(1-ethyl-1H-benzimidazol-2-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



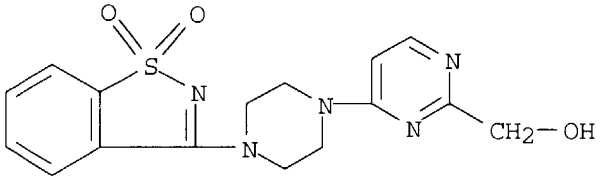
RN 400785-23-1 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(2-benzothiazolyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



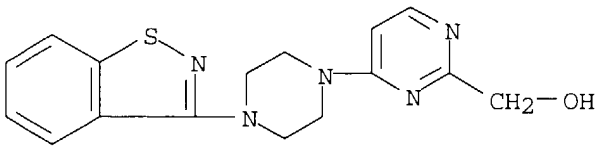
RN 400785-24-2 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(2-benzoxazolyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



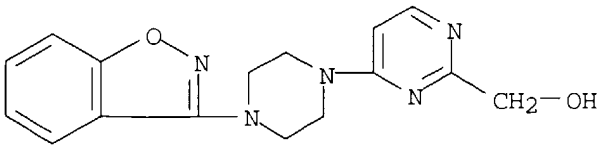
RN 400785-25-3 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(1,1-dioxido-1,2-benzisothiazol-3-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



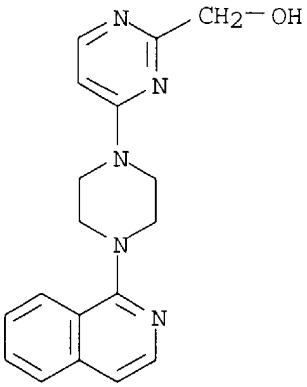
RN 400785-26-4 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



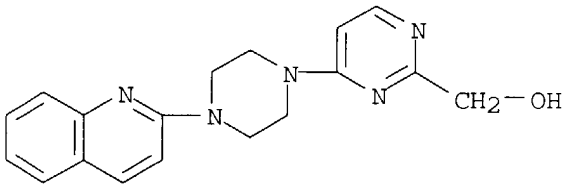
RN 400785-27-5 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(1,2-benzisoxazol-3-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



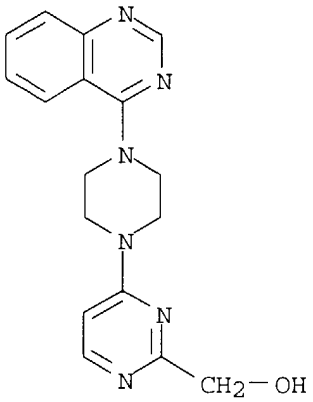
RN 400785-28-6 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(1-isoquinolinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 400785-29-7 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(2-quinolinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

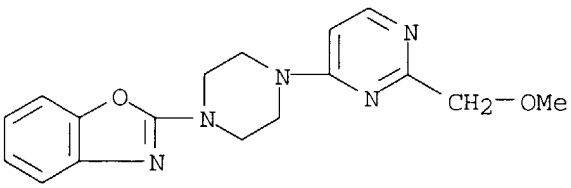


RN 400785-30-0 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(4-quinazolinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

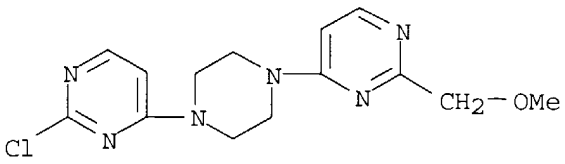


IT **400784-88-5P 400784-89-6P 400784-90-9P**
400784-91-0P 400784-92-1P 400784-93-2P
400784-94-3P 400784-95-4P 400784-96-5P
400785-01-5P 400785-02-6P 400785-03-7P
400785-04-8P 400785-05-9P 400785-06-0P
400785-07-1P 400785-08-2P 400785-09-3P
400785-10-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and structure-activity relationships of oral antidiabetic, sorbitol dehydrogenase-inhibiting heterocyclic piperazinopyrimidines)

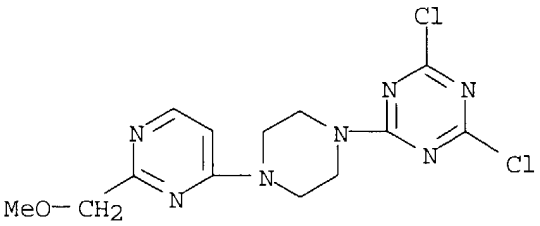
RN 400784-88-5 CAPLUS
CN Benzoxazole, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



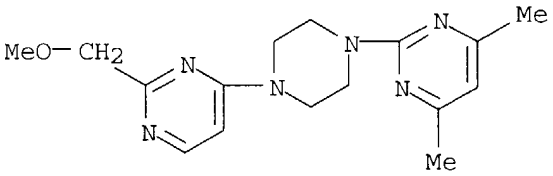
RN 400784-89-6 CAPLUS
CN Pyrimidine, 2-chloro-4-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



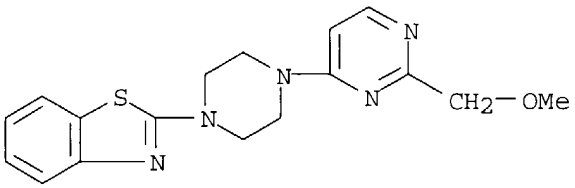
RN 400784-90-9 CAPLUS
CN 1,3,5-Triazine, 2,4-dichloro-6-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



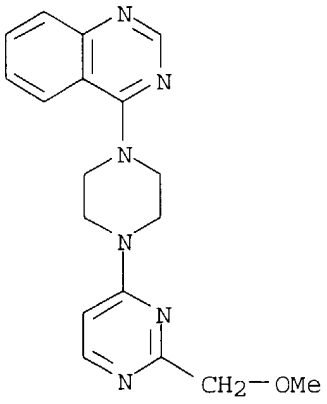
RN 400784-91-0 CAPLUS
CN Pyrimidine, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]-4,6-dimethyl- (9CI) (CA INDEX NAME)



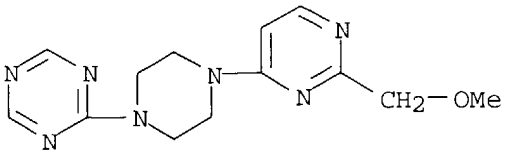
RN 400784-92-1 CAPLUS
CN Benzothiazole, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



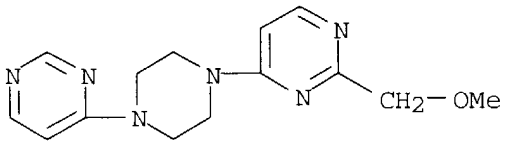
RN 400784-93-2 CAPLUS
CN Quinazoline, 4-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



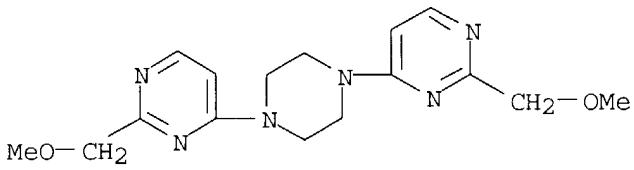
RN 400784-94-3 CAPLUS
CN 1,3,5-Triazine, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



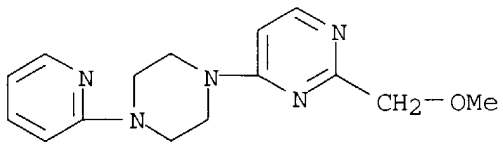
RN 400784-95-4 CAPLUS
CN Pyrimidine, 2-(methoxymethyl)-4-[4-(4-pyrimidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



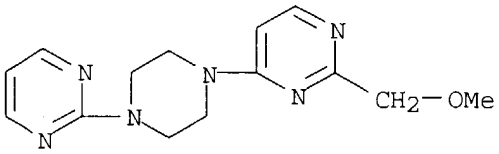
RN 400784-96-5 CAPLUS
CN Pyrimidine, 4,4'-(1,4-piperazinediyl)bis[2-(methoxymethyl)- (9CI) (CA INDEX NAME)



RN 400785-01-5 CAPLUS
CN Pyrimidine, 2-(methoxymethyl)-4-[4-(2-pyridinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 400785-02-6 CAPLUS
CN Pyrimidine, 2-(methoxymethyl)-4-[4-(2-pyrimidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



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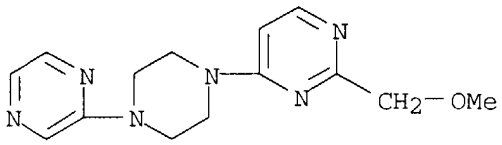

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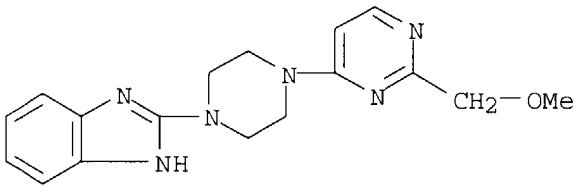

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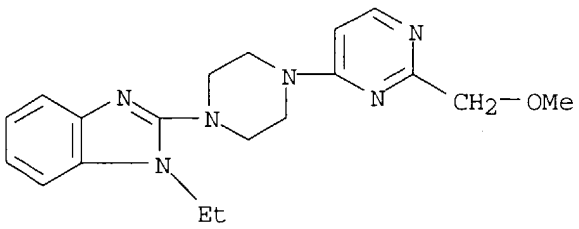

RN 400785-06-0 CAPLUS
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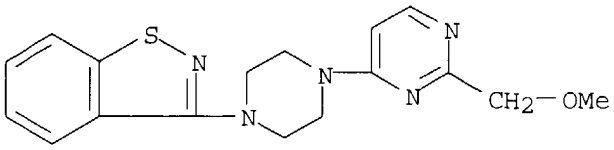

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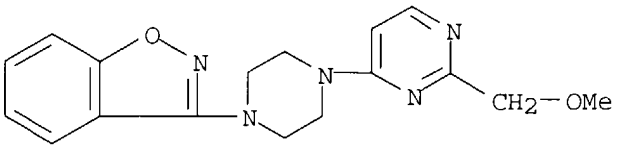

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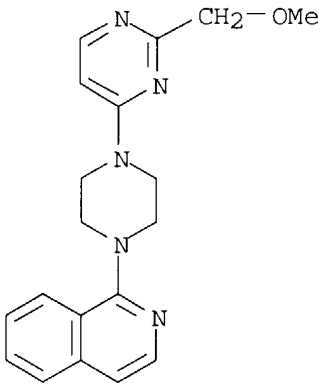
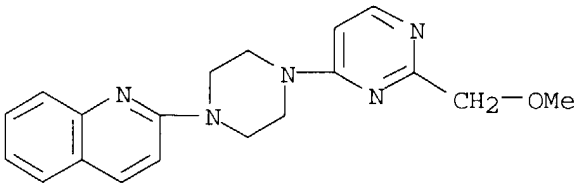
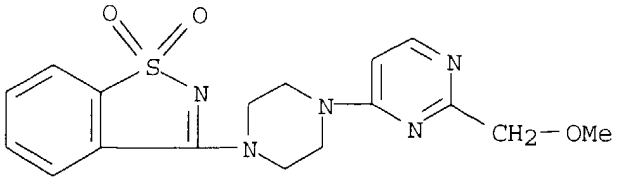


RN 400785-09-3 CAPLUS
CN Quinoline, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 400785-10-6 CAPLUS
CN 1,2-Benzisothiazole, 3-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)



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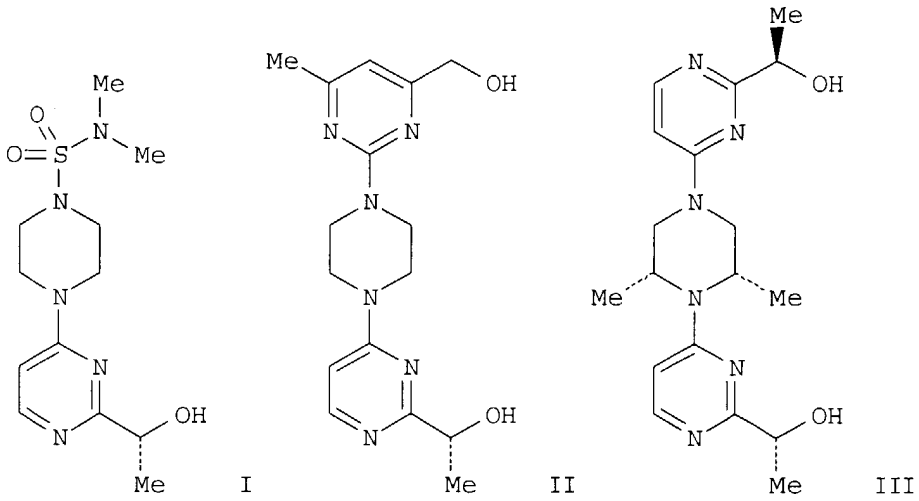

I II III

AB Optimization of a previously disclosed sorbitol dehydrogenase inhibitor (SDI, I) for potency and duration of action was achieved by replacing the metabolically labile N,N-dimethylsulfamoyl group with a variety of heterocycles. Specifically, this effort led to a series of novel, in vitro potent SDI's, e.g. the [[(hydroxymethylpyrimidinyl)piperazinyl]pyrimidinyl]ethanol II, with longer serum half-lives and acceptable in vivo activity in acutely diabetic rats. However, the desired in vivo potency in chronically diabetic rats, ED90 ≤ 5 mg/kg/day, was achieved only through further modification of the piperazine linker. Several members of this family, including [[(hydroxyethylpyrimidinyl)dimethylpiperazinyl]pyrimidinyl]ethanol III, showed better than the targeted potency with ED90 values of 1-2 mg/kg/day. III was further profiled and found to be a selective inhibitor of sorbitol dehydrogenase, with excellent pharmacodynamic/pharmacokinetic properties, demonstrating normalization of sciatic nerve fructose in a chronically diabetic rat model for .apprx.17 h, when administered orally at a single dose of 2 mg/kg/day.

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:725471 CAPLUS
DN 133:281794
TI Preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors
IN Chu-moyer, Margaret Yuhua; Murry, Jerry Anthony; Mylari, Banavara Lakshman; Zembrowski, William James
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 328 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2000059510 A1 20001012 WO 2000-IB296 20000316
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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US 1999-127437PP 19990401
AU 2000031845 A5 20001023 AU 2000-31845 20000316
AU 768720 B2 20040108
US 1999-127437PP 19990401
WO 2000-IB296 W 20000316
NZ 514144 A 20010928 NZ 2000-514144 20000316
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WO 2000-IB296 W 20000316
EP 1185275 A1 20020313 EP 2000-909565 20000316
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WO 2000-IB296 W 20000316
JP 2002541109 T2 20021203 JP 2000-609073 20000316
US 1999-127437PP 19990401
WO 2000-IB296 W 20000316
EE 200100509 A 20021216 EE 2001-509 20000316
US 1999-127437PP 19990401
WO 2000-IB296 W 20000316
US 6414149 B1 20020702 US 2000-538039 20000329
US 1999-127437PP 19990401
NO 2001004642 A 20011128 NO 2001-4642 20010925
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WO 2000-IB296 W 20000316
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US 1999-127437PP 19990401
WO 2000-IB296 W 20000316
ZA 2001008039 A 20030722 ZA 2001-8039 20011001
US 1999-127437PP 19990401
BG 106038 A 20020628 BG 2001-106038 20011023
US 1999-127437PP 19990401
WO 2000-IB296 W 20000316
US 2003065179 A1 20030403 US 2002-87869 20020228
US 6602875 B2 20030805
US 1999-127437PP 19990401
US 2000-538039 A320000329
US 6660740 B1 20031209 US 2003-384424 20030310
US 1999-127437PP 19990401
US 2000-538039 A320000329
US 2002-87869 A320020228

OS MARPAT 133:281794

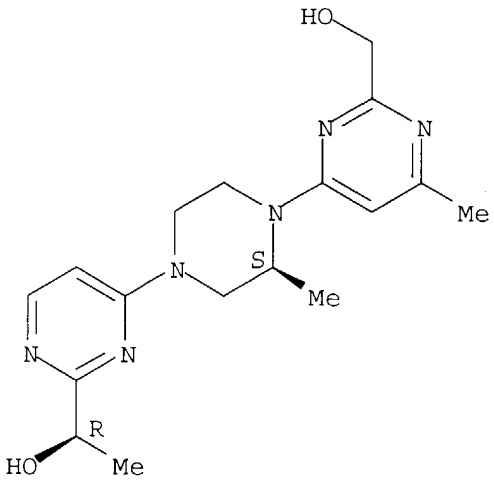
IT **300548-92-9P 300549-05-7P 300549-16-0P 300549-45-5P 300549-46-6P 300549-47-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors)

RN 300548-92-9 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 300549-05-7 CAPLUS

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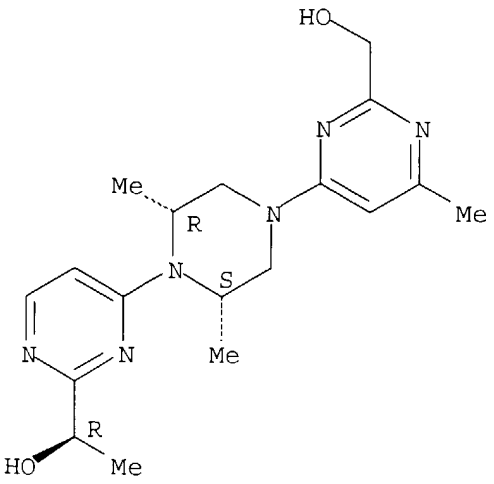
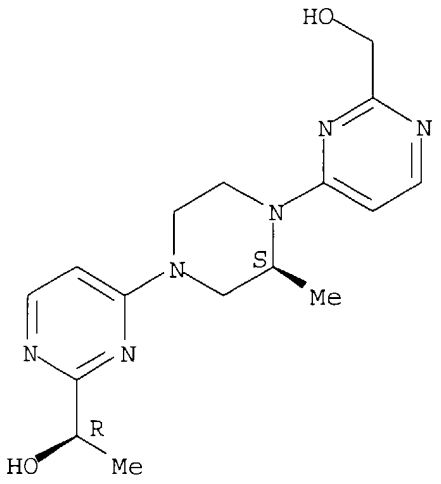
Absolute stereochemistry. Rotation (+).



RN 300549-16-0 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-3-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 300549-45-5 CAPLUS
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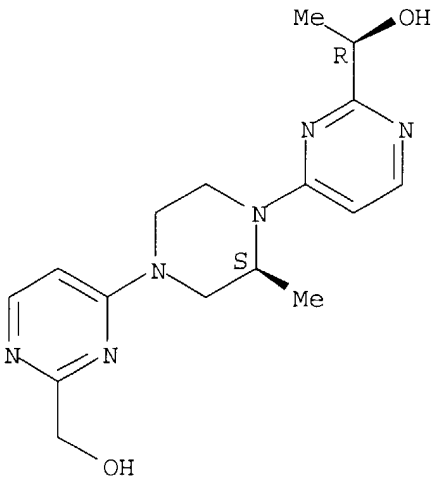
Absolute stereochemistry.



RN 300549-46-6 CAPLUS
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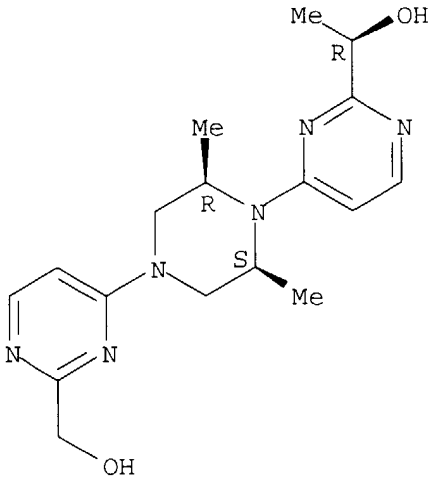
Absolute stereochemistry.



RN 300549-47-7 CAPLUS
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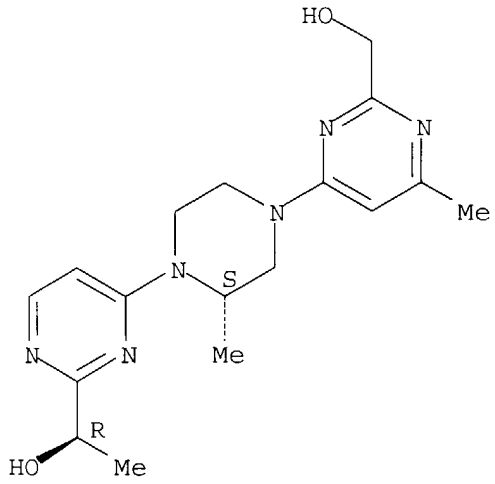
Absolute stereochemistry.



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = CHO, COMe; COCH2Me, etc.; R2 = H, alkyl, alkoxy; R3 = II-IV, etc.; R23 = CONR25R26, SO2NR25R26 (wherein R25 = H, alkyl, arylalkylenyl; R26 = arylalkylenyl); R24 = H, alkyl, alkoxycarbonyl, etc.; R27 = H, alkyl; R28, R29 = H, OH, halo, etc.], sorbitol dehydrogenase inhibitors (no data) which are useful in treating or preventing diabetic complications, particularly diabetic neuropathy,

diabetic nephropathy, diabetic microangiopathy, diabetic macroangiopathy and diabetic cardiomyopathy, were prepared and formulated. E.g., a multi-step synthesis of the pyrimidine (R)-V, was given. This invention is also directed to pharmaceutical compns. comprising a combination of the compd.I with an aldose reductase inhibitor and to methods of treating or preventing diabetic complications therewith. This invention is also directed to pharmaceutical compns. comprising a combination of the compound I with an NHE-1 inhibitor and to methods of treating cardiomyopathy and other heart-related problems therewith.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	24.22	180.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.47	-3.47

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NEWS 4	DEC 08	INPADOC: Legal Status data reloaded
NEWS 5	SEP 29	DISSABS now available on STN
NEWS 6	OCT 10	PCTFULL: Two new display fields added
NEWS 7	OCT 21	BIOSIS file reloaded and enhanced
NEWS 8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9	NOV 24	MSDS-CCOHS file reloaded
NEWS 10	DEC 08	CABA reloaded with left truncation
NEWS 11	DEC 08	IMS file names changed
NEWS 12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS 13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14	DEC 17	DGENE: Two new display fields added
NEWS 15	DEC 18	BIOTECHNO no longer updated
NEWS 16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS 17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS 18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19	DEC 22	ABI-INFORM now available on STN
NEWS 20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS 21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAplus
NEWS 22	FEB 05	German (DE) application and patent publication number format changes
NEWS 23	MAR 03	MEDLINE and LMEDLINE reloaded
NEWS 24	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS 25	MAR 03	FRANCEPAT now available on STN

NEWS EXPRESS	MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
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FILE 'HOME' ENTERED AT 11:41:13 ON 24 MAR 2004

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:41:22 ON 24 MAR 2004
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0
DICTIONARY FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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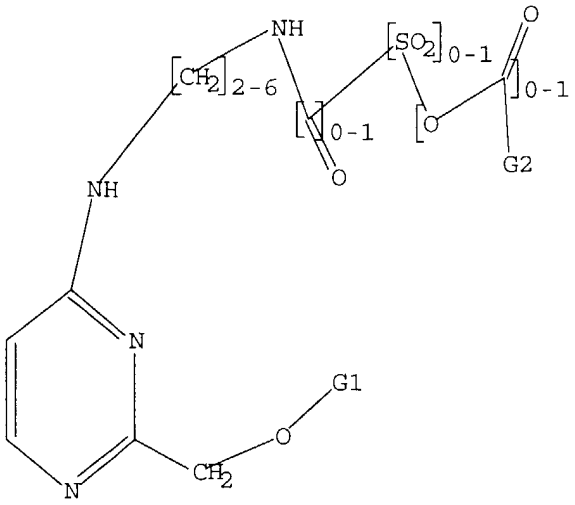

G1 H,Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,CH2,Ph

G2 Cb,Cy,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

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FULL SEARCH INITIATED 11:41:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 975 TO ITERATE

100.0% PROCESSED 975 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.02

L2 0 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'MARPAT' ENTERED AT 11:42:01 ON 24 MAR 2004
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FILE CONTENT: 1988-PRESENT (VOL 140 ISS 12)(20040319/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6696581 24 FEB 2004
DE 10317487 19 FEB 2004
EP 1389746 18 FEB 2004
JP 2004059557 26 FEB 2004
WO 2004015164 19 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

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FULL SCREEN SEARCH COMPLETED -    5721 TO ITERATE

 89.4% PROCESSED    5117 ITERATIONS                                 4 ANSWERS

100.0% PROCESSED    5721 ITERATIONS                                 4 ANSWERS
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L3             4 SEA SSS FUL L1

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FULL ESTIMATED COST                                     109.42     265.05

FILE 'CAPLUS' ENTERED AT 11:42:45 ON 24 MAR 2004
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FILE COVERS 1907 - 24 Mar 2004  VOL 140 ISS 13
FILE LAST UPDATED: 23 Mar 2004  (20040323/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


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L4             4 L3

=> d l4 fbib hitstr abs total

L4   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2001:63992  CAPLUS
DN   134:116237
TI   Preparation of bradykinin B1 receptor antagonists
IN   Ohlmeyer, Michael H. J.; Baldwin, John J.; Dolle, Roland E., III;
     Paradkar, Vidyadhar; Quintero, Jorge Gabriel; Pan, Gonghua
PA   Pharmacopeia, Inc., USA
SO   PCT Int. Appl., 231 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.       KIND  DATE           APPLICATION NO.  DATE
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PI	WO 2001005783	A1	20010125	WO 2000-US19185	20000714
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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	AT 250053	E	20031015	AT 2000-950343	20000714
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				US 1999-143990PP	19990715
				WO 2000-US19185A1	20000714

OS MARPAT 134:116237
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. I [X, Y, Z = CH or N; A = A1 or A2, where A1 is R4R5NCO (R4 = H, aryl, heteroaryl, substituted alkyl; R5 = H, alkyl), 5-aryl-1,2,4-triazol-3-yl, 2-aryl-4-imidazolyl, or 2-aryl-5-thiazolyl and A2 is R7CONH (R7 = aryl or alkylaryl), R7SO2NH, R4NH, R4O; Q = heteroaryl, aryl, CH2R13 (R13 = OH, OTHP, 1-imidazolyl, 1-pyrrolyl), CH:NOMe, or 1,3-dithian-2-yl; W = H, Cl, F, alkyl, aryl, heteroaryl, alkoxy, alkylthio, an amino group, arylcarbamoyl, etc.; R1 = alkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, etc.; R2 = H or alkyl or R1R2C is a ring optionally containing O, S or N; R3 = H or alkyl, or when n is zero, R2 and R3 taken together form a 6-membered ring (with provisos)] were prepared as bradykinin B1 receptor antagonists. Thus, D-leucine derivative II was prepared by substitution reaction of D-leucine 4-chlorobenzylamide with 2,4-dichloro-(or difluoro)-6-(1H-imidazol-1-yl)pyrimidine and then 3-chlorobenzylamine. Pharmaceutical formulations containing II are described.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:455465 CAPLUS
DN **129:142534**
TI Method for processing silver halide photographic material using a developer containing a mercaptopyrimidine
IN Fukui, Kota; Sasaoka, Senzo; Yamada, Kosaburo

PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10186596	A2	19980714	JP 1996-340246	19961219
	US 5976758	A	19991102	US 1997-995146	19971219
				JP 1996-340246	19961219

OS MARPAT 129:142534
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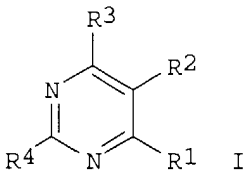

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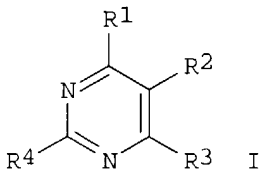
AB Claimed method for processing photog. material containing a hydrazine derivative in an emulsion layer or other hydrophilic colloid layer comprises imagewise exposure followed by development with a developer solution of pH 9.0-10.5 containing ascorbic acid, a 1-phenyl-3-pyrazolidone derivative (auxiliary developing agent), a pyrimidine derivative I (R1-4 = H, halo, a group linking with the pyrimidine nucleus through C, N, S, or P atom; at least one of R1-4 is mercapto group; R1 and R3 are not OH) and not containing dihydroxybenzene. The process is free of dihydroxybenzene (hydroquinone) which is environmentally toxic, and provides high contrast images by a low pH and low replenishment process. Preferable nucleator is a polyiminothioether derivative having dialkylamino group at both terminals. Preferable developer solution has the pH of ≤11.0 with the replenishment rate of ≤180 mL/m2. It provides a black-and-white Ag image with extremely high contrast and good tonal reproduction quality. Thus, a graphic arts film containing an 1-(2-carboxyethylcarbonyl)-2-[4-[3-(hexylthioethylureido)phenylsulfoamino]phenyl]hydrazine and bis(piperidin-1-yl-ethoxyethyl)thioether was developed by a developer solution containing Na erythorbate, 1-phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone and 2,6-dimercaptopyrimidine, and showed the mentioned advantages.

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:699013 CAPLUS
DN **128:28562**
TI Developer and method for processing of silver halide photographic material
IN Watanabe, Harumi; Sasaki, Hirotomo
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 40 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09274290	A2	19971021	JP 1996-325522	19961205
				JP 1996-21280	19960207

OS MARPAT 128:28562
GI



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AB The title developer solution contains 0.3-1.5 mol/L a carbonate as main developer and ≥1 I (R1-4 = substituent; at least 1 of R1-R4 is mercapto group) preferably 0.01-10 mmol/L. The invention can reduce Ag pollution without affecting photog. properties.

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:780258 CAPLUS
DN **123:169647**
TI Preparation of sulfonylaminopyrimidines as endothelin antagonists.
IN Breu, Volker; Burri, Kaspar; Cassal, Hean-Marie; Clozel, Martine; Hirth, Georges; Loeffler, Bernd-Michael; Mueller, Marcel; Neidhart, Werner; Ramuz, Henri
PA F. Hoffmann-La Roche AG, Switz.
SO Eur. Pat. Appl., 46 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 633259	A1	19950111	EP 1994-109257	19940616
	EP 633259	B1	19990113		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
				CH 1993-1924 A	19930628
	TW 394761	B	20000621	TW 1994-83105221	19940608
				CH 1993-1924 A	19930628
	CA 2125730	AA	19941229	CA 1994-2125730	19940613
				CH 1993-1924 A	19930628
	AT 175669	E	19990115	AT 1994-109257	19940616
				CH 1993-1924 A	19930628
	ES 2127850	T3	19990501	ES 1994-109257	19940616
				CH 1993-1924 A	19930628
	ZA 9404434	A	19950103	ZA 1994-4434	19940621
				CH 1993-1924 A	19930628
	IL 110089	A1	20000831	IL 1994-110089	19940622
				IL 1992-101650 A0	19920420
				CH 1993-1924 A	19930628
	AU 9465948	A1	19950105	AU 1994-65948	19940624
	AU 678467	B2	19970529		
				CH 1993-1924 A	19930628
	HU 67636	A2	19950428	HU 1994-1907	19940624

				CH 1993-1924 A 19930628
	FI 9403084	A	19941229	FI 1994-3084 19940627
				CH 1993-1924 A 19930628
	NO 9402428	A	19941229	NO 1994-2428 19940627
				CH 1993-1924 A 19930628
	BR 9402558	A	19950328	BR 1994-2558 19940627
				CH 1993-1924 A 19930628
	CN 1106007	A	19950802	CN 1994-106574 19940627
	CN 1050839	B	20000329	
				CH 1993-1924 A 19930628
	LT 3723	B	19960226	LT 1994-1979 19940627
				CH 1993-1924 A 19930628
	LV 11175	B	19960620	LV 1994-131 19940627
				CH 1993-1924 A 19930628
	US 5541186	A	19960730	US 1994-266072 19940627
				CH 1993-1924 A 19930628
				CH 1994-1575 A 19940520
	PL 175771	B1	19990226	PL 1994-304007 19940627
				CH 1993-1924 A 19930628
	PL 177031	B1	19990930	PL 1994-323036 19940627
				CH 1993-1924 A 19930628
	RU 2142457	C1	19991210	RU 1994-22258 19940627
				CH 1993-1924 A 19930628
	CZ 287184	B6	20001011	CZ 1994-1573 19940627
				CH 1993-1924 A 19930628
	JP 07017972	A2	19950120	JP 1994-146003 19940628
	JP 2545200	B2	19961016	
				CH 1993-1924 A 19930628
	RO 114325	B3	19990330	RO 1994-1112 19940628
				CH 1993-1924 A 19930628
	SK 280736	B6	20000711	SK 1994-779 19940628
				CH 1993-1924 A 19930628

PATENT FAMILY INFORMATION:

FAN 1993:408822

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 510526	A1	19921028	EP 1992-106602	19920416
	EP 510526	B1	19961204		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE

				CH 1991-1242 A 19910425
				CH 1992-343 A 19920206
	RU 2083567	C1	19970710	RU 1992-5011295 19920131
				CH 1991-1242 A 19910425
	US 5270313	A	19931214	US 1992-869274 19920415
				CH 1991-1242 A 19910425
				CH 1992-343 A 19920206
	AU 9214976	A1	19921029	AU 1992-14976 19920416
	AU 652238	B2	19940818	
				CH 1991-1242 A 19910425
				CH 1992-343 A 19920206
	ZA 9202832	A	19930127	ZA 1992-2832 19920416
				CH 1991-1242 A 19910425
	AT 145898	E	19961215	AT 1992-106602 19920416
				CH 1991-1242 A 19910425
				CH 1992-343 A 19920206
	ES 2096673	T3	19970316	ES 1992-106602 19920416
				CH 1991-1242 A 19910425
				CH 1992-343 A 19920206

IL 101650	A1	19961016	IL 1992-101650	19920420
			CH 1991-1242 A	19910425
			CH 1992-343 A	19920206
HU 61289	A2	19921228	HU 1992-1329	19920421
			CH 1991-1242 A	19910425
			CH 1992-343 A	19920206
JP 05155864	A2	19930622	JP 1992-126708	19920421
JP 06070021	B4	19940907		
			CH 1991-1242 A	19910425
			CH 1992-343 A	19920206
NO 9201609	A	19921026	NO 1992-1609	19920424
			CH 1991-1242 A	19910425
			CH 1992-343 A	19920206
CA 2067288	AA	19921026	CA 1992-2067288	19920427
			CH 1991-1242 A	19910425
			CH 1992-343 A	19920206

OS MARPAT 123:169647
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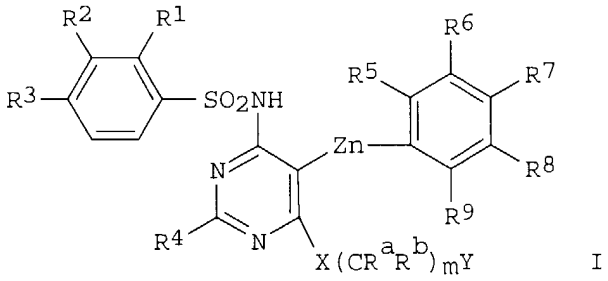

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AB Title compds. (I; R1-R3 = H, alkyl, alkoxy, alkylthio, alkenyl, halo, CF3, hydroxyalkoxy, haloalkoxy, alkanoylalkyl, hydroxyalkyl, CO2H, amino, etc.; R2R3, R5R6, R6R7 = butadienyl, methylenedioxy, ethylenedioxy, isopropylidenedioxy; R4 = H, alkyl, cycloalkyl, CF3, alkoxy, alkynyloxy, alkylthio, alkylthioalkyl, hydroxyalkyl, dihydroxyalkoxy, alkylsulfinyl, alkylsulfonyl, aryl, arylthio, aryloxy, heterocyclyl, heterocyclylalkyl, etc.; R5-R9 = H, halo, CF3, alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl; Ra, Rb = H, alkyl, alkoxy, alkylthio; X = O, S, NH; Y = O2CNR10R11, HNOCNR10R11, O2COR10, HNCO2R10; R10 = alkyl, cycloalkyl, hydroxyalkyl, carboxyalkyl, alkoxycarbonylalkyl, alkanoyloxyalkyl, arylcarbamoylalkyl, heterocyclyl, heterocyclylalkyl, etc.; R11 = H, R10; m = 1-3; n = 0,1), were prepared Thus, 2-pyridinecarbonyl azide was heated in PhMe; 4-tert-butyl-N-[6-(2-hydroxyethoxy)-5-(2-methoxyphenoxy)-2,2'-bipyrimidin-4-yl]benzenesulfonamide was added to give pyridine-2-carbaminic acid, 2-[6-(4-tert-butylphenylsulfonylamino)-5-(2-methoxyphenoxy)-2,2'-bipyrimidin-4-yloxy]ethyl ester. The latter at 30 mg/kg orally in rats gave a 30% reduction in average arterial blood pressure.

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	17.34	282.39

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL